

# **Microsoft Excel 2010- Illustrated**

## **Unit A:**

### **Getting Started with Excel 2010**

# Objectives

- Understand spreadsheet software
- Tour the Excel 2010 window
- Understand formulas
- Enter labels and values and use the Sum button

# Objectives

- Edit cell entries
- Enter and edit a simple formula
- Switch worksheet views
- Choose print options

# Understanding Spreadsheet Software

- Microsoft Excel is an electronic spreadsheet program
  - An electronic spreadsheet program allows you to perform **numeric calculations**
  - The spreadsheet is called a **worksheet**
    - Individual worksheets are stored in a **workbook** which is the Excel file

# Understanding Spreadsheet Software

- Advantages of using Excel
  - Enter data quickly and accurately
  - Recalculate data easily
  - Perform what-if analysis

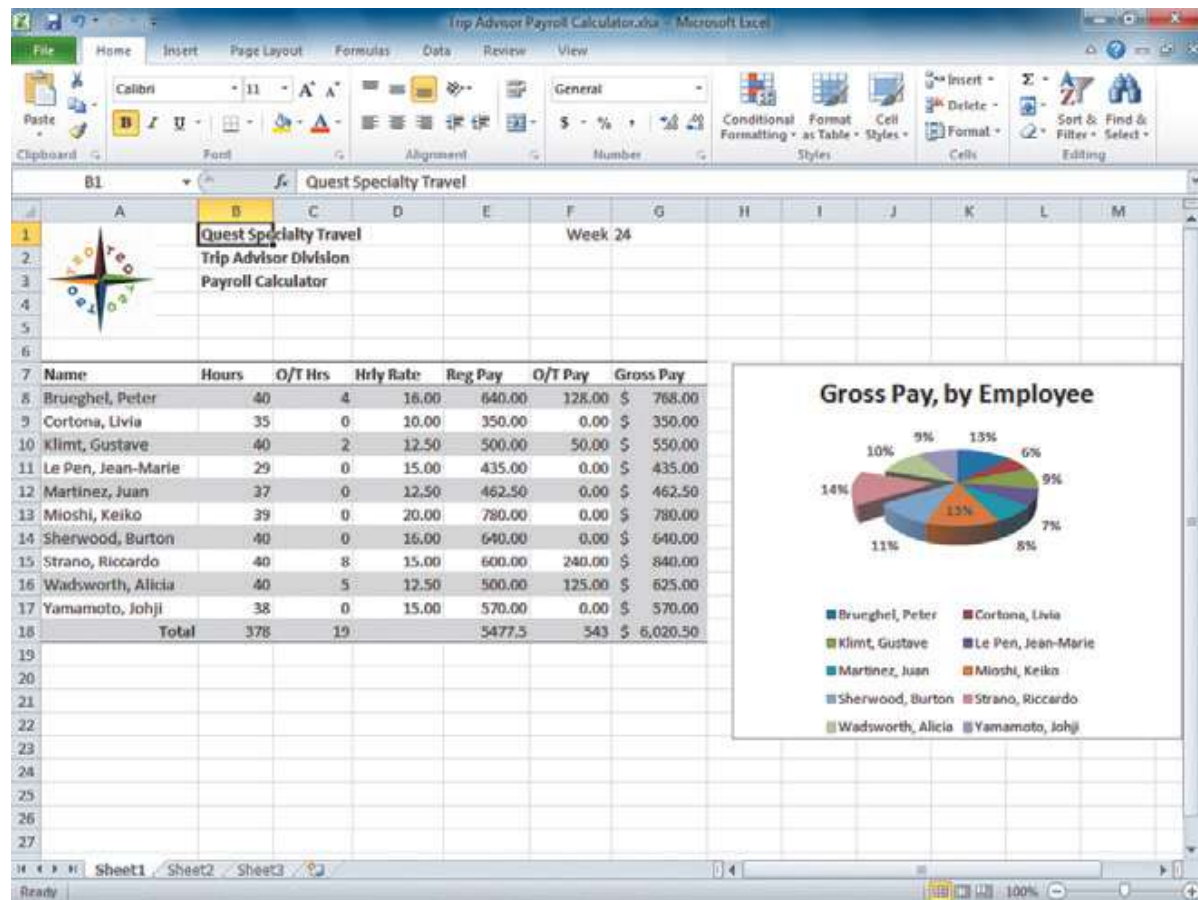


# Understanding Spreadsheet Software

- Advantages of using Excel
  - Change the appearance of information
  - Create charts
  - Share information
  - Build on previous work

# Understanding Spreadsheet Software

## Sample worksheet with chart



# Touring the Excel 2010 Window

- The **Name box** displays the active cell address
- The **formula bar** allows you to enter or edit data in the worksheet
- The intersection of a row and a column is called a **cell**



# Touring the Excel 2010 Window

- Each cell has its own unique location called a **cell address**
  - A cell address is identified by its coordinates (i.e. A1)

# Touring the Excel 2010 Window

- The cell in which you are working is called the **active cell**
- **Sheet tabs** let you switch from sheet to sheet in a workbook

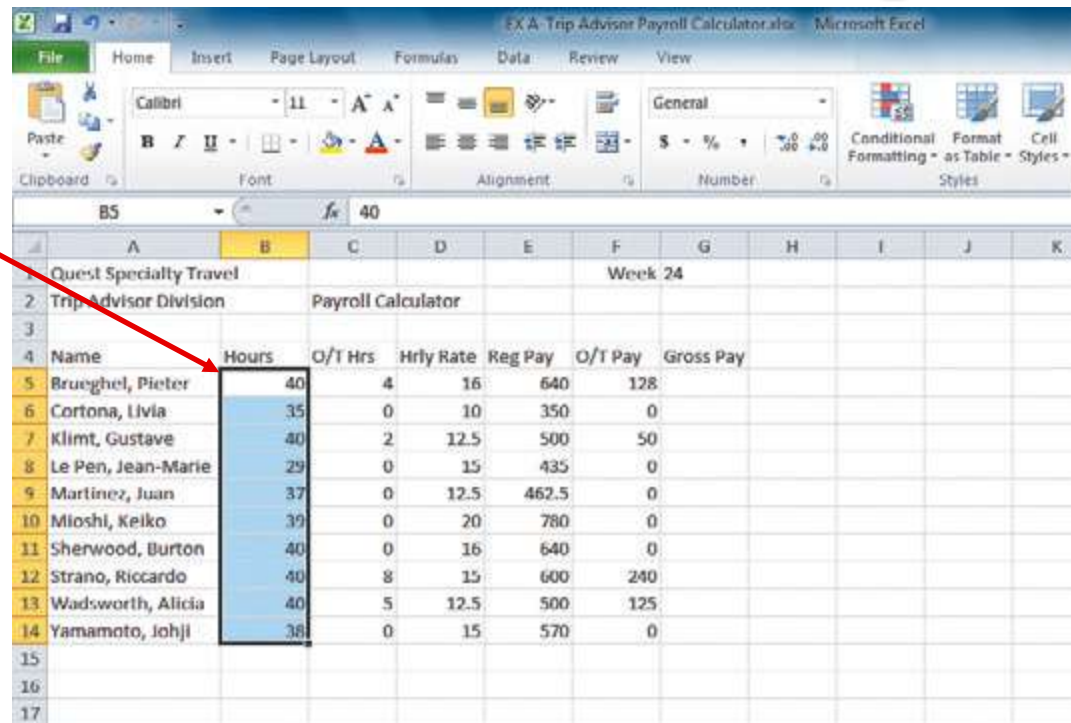
# Touring the Excel 2010 Window

- The **status bar** provides a brief description of the active command or task in progress
- The **mode indicator** provides additional information about certain tasks

# Touring the Excel 2010 Window

- A selection of two or more cells such as B5:B14 is called a **range**

Cell  
Range



	A	B	C	D	E	F	G	H	I	J	K
1	Quest Specialty Travel					Week 24					
2	Trip Advisor Division		Payroll Calculator								
3											
4	Name	Hours	O/T Hrs	Hrly Rate	Reg Pay	O/T Pay	Gross Pay				
5	Brueghel, Pieter	40	4	16	640	128					
6	Cortona, Livia	35	0	10	350	0					
7	Klimt, Gustave	40	2	12.5	500	50					
8	Le Pen, Jean-Marie	29	0	15	435	0					
9	Martinez, Juan	37	0	12.5	462.5	0					
10	Mioshi, Keiko	39	0	20	780	0					
11	Sherwood, Burton	40	0	16	640	0					
12	Strano, Riccardo	40	8	15	600	240					
13	Wadsworth, Alicia	40	5	12.5	500	125					
14	Yamamoto, Johji	38	0	15	570	0					
15											
16											
17											

# Touring the Excel 2010 Window

Open workbook

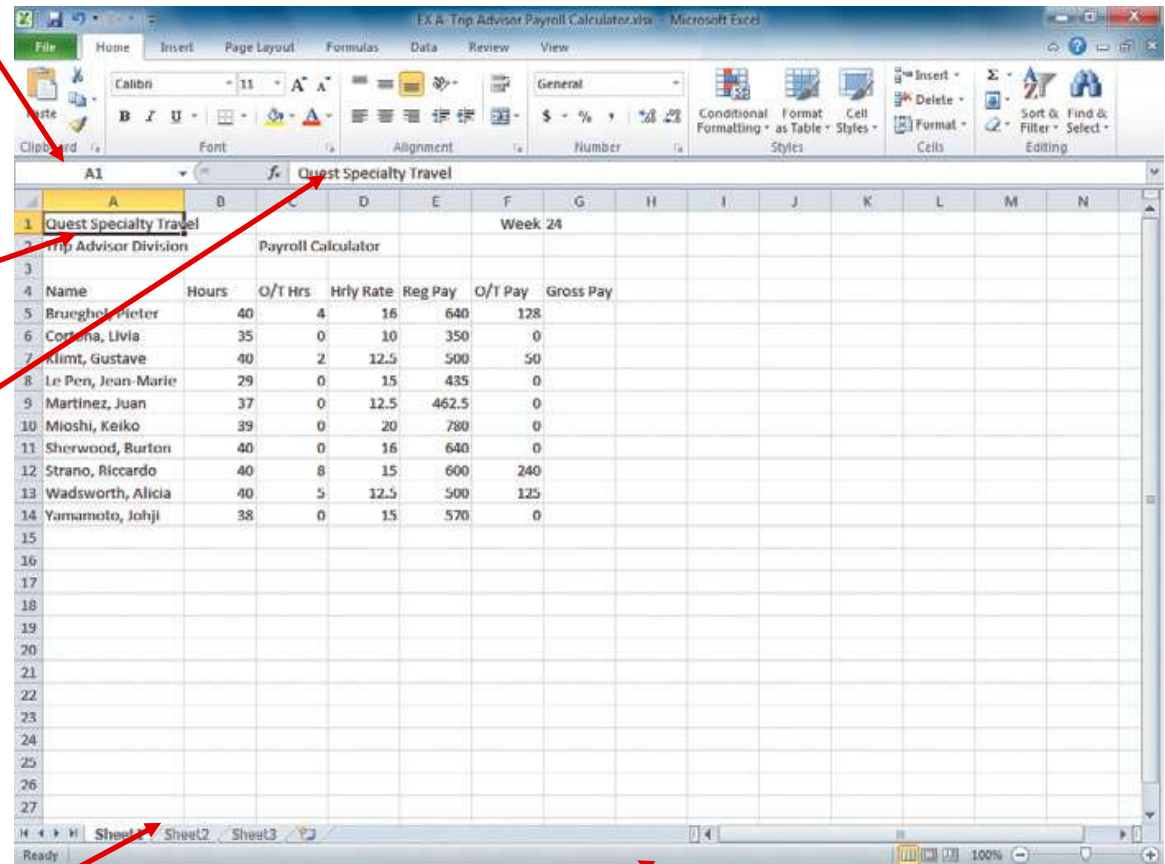
Name box and  
current cell  
address

Cell  
pointer

Formula  
bar

Sheet tabs

Status bar





# Understanding Formulas

- **Formulas** are equations in a worksheet
  - Excel formulas allow users at every level of mathematical expertise to make calculations with accuracy

# Understanding Formulas

- When creating calculations in Excel, it is important to:
  - Know where the formulas should be
  - Know exactly what cells and arithmetic operations are needed

# Understanding Formulas

- When creating calculations in Excel, it is important to:
  - Create formulas with care
  - Use cell references rather than values
  - Determine what calculations will be needed

# Understanding Formulas

## Viewing a Formula

Formula  
appears in  
formula bar

Result of  
formula

The screenshot displays the Microsoft Excel interface with the following details:

- Title Bar:** EX A-Trip Advisor Payroll Calculator.xlsx - Microsoft Excel
- Ribbon Tabs:** File, Home, Insert, Page Layout, Formulas, Data, Review, View.
- Formulas Tab:** Active, showing the formula bar with  $=D5 \times D5$ .
- Spreadsheet Content:**

	A	B	C	D	E	F	G	H	I	J	K
1	Quest Specialty Travel				Week 24						
2	Trip Advisor Division		Payroll Calculator								
3											
4	Name	Hours	O/T Hrs	Hourly Rate	Reg Pay	O/T Pay	Gross Pay				
5	Brueghel, Pieter	40	4		640	128					
6	Cortona, Livia	35	0	10	350	0					
7	Klimt, Gustavo	40	2	12.5	500	50					
8	Le Pen, Jean-Marie	29	0	15	435	0					
9	Martinez, Juan	37	0	12.5	462.5	0					
10	Mioshi, Keiko	39	0	20	780	0					
11	Sherwood, Burton	40	0	16	640	0					
12	Strano, Riccardo	40	8	15	600	240					
13	Wadsworth, Alicia	40	5	12.5	500	125					
14	Yamamoto, Iohji	38	0	15	570	0					
15											

# Understanding Formulas

## Excel arithmetic operators

operator	purpose	example
+	Addition	=A5+A7
-	Subtraction or negation	=A5-10
*	Multiplication	=A5*A7
/	Division	=A5/A7
%	Percent	=35%
^ (caret)	Exponent	=6^2 (same as 6 <sup>2</sup> )



# Entering Labels and Values and Using the Sum Button

- **Labels** contain text and numerical information not used in calculations
  - Labels help you identify data in worksheet rows and columns
  - You should enter all the labels first before entering other content
    - An example of a label is the word **“Total”** in cell A15

# Entering Labels and Values and Using the Sum Button

- **Values** are numbers, formulas, and functions that can be used in calculations
  - An example of a number value is “**40**” in cell B5
  - An example of a formula value is “**=C5\*(2\*D5)**” in cell F5

# Entering Labels and Values and Using the Sum Button

- A **function** is a built-in formula
  - A function includes **arguments**, the information necessary for the calculation
  - An example of a function value is “**=SUM(B5:B14)**” in cell B15

# Entering Labels and Values and Using the Sum Button

- Clicking the **Sum button** sums the adjacent range above or to the left, though you can adjust the range
- The fill handle fills cells based on the first number sequence in the range

# Entering Labels and Values and Using AutoSum

## Creating a formula using the AutoSum button

**Formula**

**AutoSum button**

**Fill button**

**Cells included in formula**

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Quest Specialty Travel					Week 24							
2	Trip Advisor Division		Payroll Calculator										
3													
4	Name	Hours	O/T Hrs	Hrly Rate	Reg Pay	O/T Pay	Gross Pay						
5	Brueghel, Pieter	40	4	16	640	128							
6	Cortona, Livia	35	0	10	350	0							
7	Klimt, Gustave	40	2	12.5	500	50							
8	Le Pen, Jean-Marie	29	0	15	435	0							
9	Martinez, Juan	37	0	12.5	462.5	0							
10	Mioshi, Keiko	39	0	20	780	0							
11	Sherwood, Burton	40	0	16	640	0							
12	Strano, Riccardo	40	8	15	600	240							
13	Wadsworth, Alicia	40	5	12.5	500	125							
14	Yamamoto, Johji	38	0	15	570	0							
15													
16													
17													



# Editing Cell Entries

- You can change, or **edit**, the contents of an active cell at any time
- To edit the contents of the active cell:
  - Double-click the cell, or
  - Click in the formula bar, or
  - Just start typing
- Excel switches to Edit mode when you are making cell entries

# Editing Cell Entries

## Worksheet in Edit mode

Active  
cell

Insertion  
point

Mode  
indicator

EX A - Trip Advisor Payroll Calculator.xlsx - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View

Calibri 11 A A Font Alignment Number Conditional Formatting Styles Cell Styles Insert Delete Sort & Find & Format Cells Editing

A5 Brueghel, Peter






	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Quest Specialty Travel						Week 24							
2	Trip Advisor Division						Payroll Calculator							
4	Name	Hours	O/T Hrs	Hrly Rate	Reg Pay	O/T Pay	Gross Pay							
5	Brueghel, Peter	40	4	16	640	128								
6	Cordana, Livia	35	0	10	350	0								
7	Klimt, Gustave	40	2	12.5	500	50								
8	Le Pen, Jean-Marie	29	0	15	435	0								
9	Martinez, Juan	37	0	12.5	462.5	0								
10	Miوشي, Keiko	39	0	20	780	0								
11	Sherwood, Burton	40	0	16	640	0								
12	Strano, Riccardo	40	8	15	600	240								
13	Wadsworth, Alicia	40	6	12.5	500	150								
14	Yamamoto, Johji	38	0	15	570	0								
15	Totals	378	20	144.5	5477.5	568	0							
16														
17														
18							Average Gross Pay							
19														
20														
21														
22														
23														
24														
25														
26														
27														

Sheet1 Sheet2 Sheet3

Edit

# Editing Cell Entries

## Common pointers in Excel

name	pointer	use to
Normal		Select a cell or range; indicates Ready mode
Copy		Create a duplicate of the selected cell(s)
Fill handle		Create an alphanumeric series in a range
I-beam		Edit contents of formula bar
Move		Change the location of the selected cell(s)

# Entering and Editing a Simple Formula

- Formulas start with the equal sign (=), also called the **formula prefix**
- **Calculation operators** in formulas indicate what type of calculation you want to perform

# Entering and Editing a Simple Formula

- **Arithmetic operators** perform mathematical calculations such as adding and subtracting
  - Examples of arithmetic operators are  
 $+$   $-$   $*$   $/$   $\%$   $\wedge$



# Entering and Editing a Simple Formula

- **Comparison operators** compare values for the purpose of true/false results
- Examples of comparison operators are  
= > < >= <= <>

# Entering and Editing a Simple Formula

- **Text concatenation operators** join strings of text in different cells
  - An example of a text concatenation operator is &

# Entering and Editing a Simple Formula

- **Reference operators** enable you to use ranges in calculations
  - Examples of reference operators are  
: , (space)

# Switching Worksheet Views

- You can change your view of the worksheet window by using either:
  - View tab on the Ribbon
  - View buttons on the status bar

# Switching Worksheet Views

- **Normal view** shows the worksheet without including headers and footers or tools like rulers and a page number indicator



# Switching Worksheet Views

- **Page Layout View** provides a more accurate view of how a worksheet will look when printed
  - It shows page margins, headers and footers, rulers, etc.

# Switching Worksheet Views

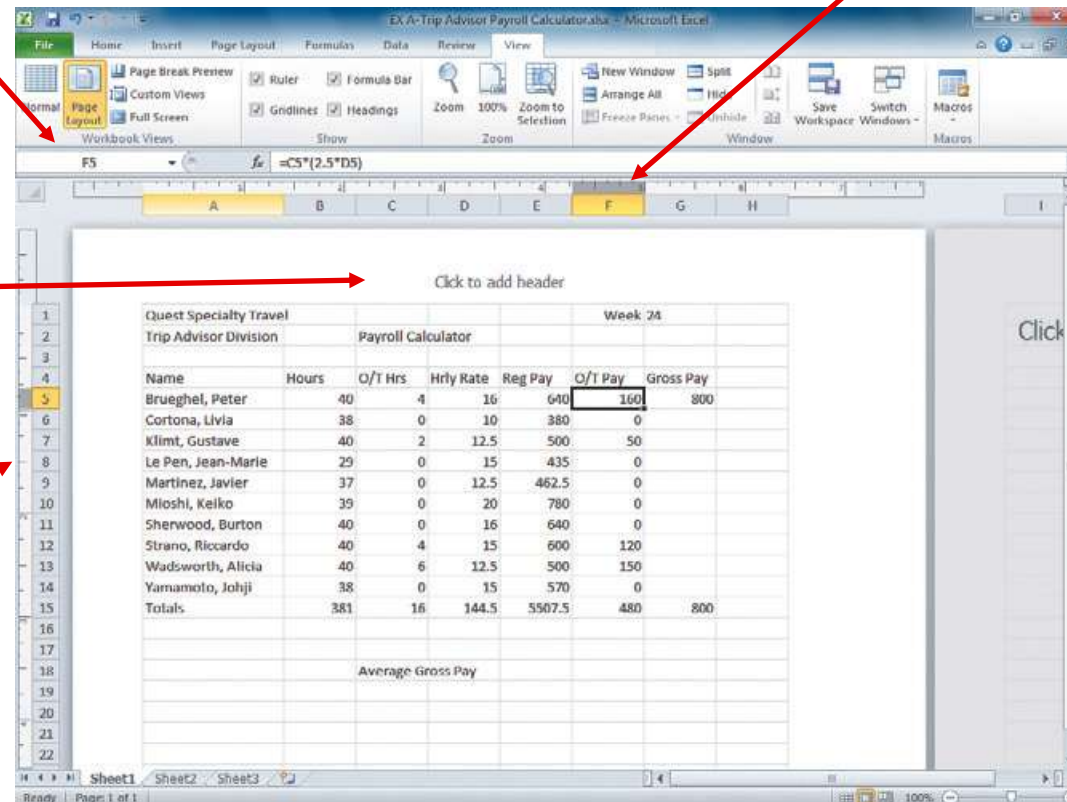
## Page Layout View

Horizontal ruler

Workbook Views group

Header text box

Vertical ruler



# Switching Worksheet Views

- **Page Break Preview** displays a reduced view of each page of the worksheet, along with page break indicators

# Switching Worksheet Views

## Page Break Preview

Blue outline indicates print area

Bottom page break indicator

Name	Hours	O/T Hrs	Hly Rate	Reg Pay	O/T Pay	Gross Pay
Brueghel, Peter	40	4	16	640	60	800
Costanza, Lisa	30	0	10	300	0	300
Diarr, Gustave	40	2	12.5	500	50	550
Le Pen, Jean-Mar	29	0	15	435	0	435
Martinez, Javier	37	0	12.5	462.5	0	462.5
Moschi, Koko	38	0	20	760	0	760
Skenevood, Eamon	40	0	16	640	0	640
Stasio, Riccardo	40	0	15	600	0	600
Thornworth, Alicia	40	0	12.5	500	0	500
Yamamoto, Juhji	38	0	15	570	0	570
Totals	381	6	14.5	5507.5	100	5607.5

Average Gross Pay

# Choosing Print Options

- You can see how a worksheet would look when printed using:
  - Page Layout tab
    - The dotted line indicates the print area, the area to be printed
  - Print Preview
    - You can print from this view by clicking the Print button on the Ribbon



# Choosing Print Options

- Page Layout tab
  - Page Setup group
    - Print orientation: landscape or portrait
  - Scale to Fit group
  - Sheet Options group

# Choosing Print Options

## Worksheet with Portrait orientation

Dotted line  
surrounds  
print area

Name	Hours	O/T Hrs	Hrly Rate	Reg Pay	O/T Pay	Gross Pay
Brueghel, Peter	40	4	16	640	160	800
Cortona, Livia	38	0	10	380	0	
Klimt, Gustave	40	2	12.5	500	50	
Le Pen, Jean-Marie	29	0	15	435	0	
Martinez, Javier	37	0	12.5	462.5	0	
Mioshi, Keiko	39	0	20	780	0	
Sherwood, Burton	40	0	16	640	0	
Strano, Riccardo	40	4	15	600	120	
Wadsworth, Alicia	40	6	12.5	500	150	
Yamamoto, Johji	38	0	15	570	0	
Totals	381	16	144.5	5507.5	480	800
Average Gross Pay						
Your Name						

# Choosing Print Options

- Printing in Backstage view lets you choose the number of copies, the printer, etc.

# Choosing Print Options

## Worksheet with Portrait orientation

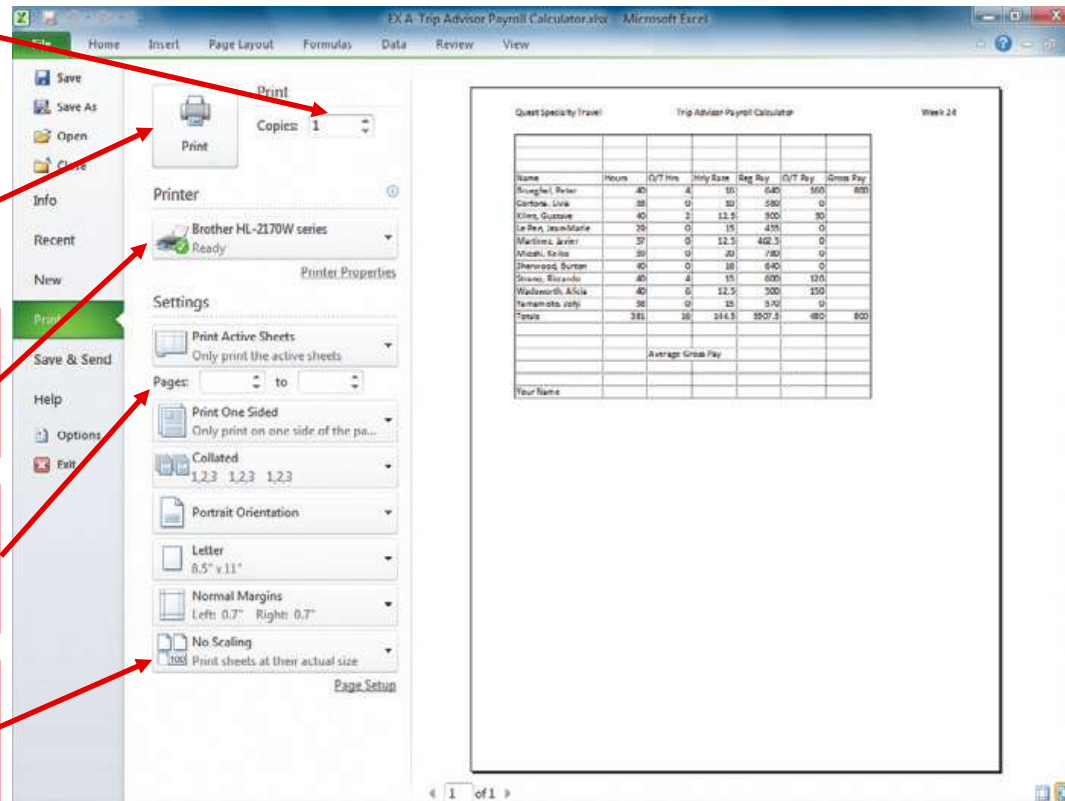
Number of  
copies

Print  
button

Active  
printer

Pages to  
print

Print  
scaling



# Summary

- Understand spreadsheet software
- Tour the Excel 2010 window
- Understand formulas
- Enter labels and values and use the Sum button



# Summary

- Edit cell entries
- Enter and edit a simple formula
- Switch worksheet views
- Choose print options